

ABSTRACT

5 The invention relates to the recognition of digital  
finger prints, more particularly to recognition by an  
elongate bar of sensors able to detect crests and  
valleys of finger prints when a finger is passed in a  
relative manner in front of a sensor in an essentially  
10 parallel manner in relation to the direction of  
elongation of said bar. The inventive method comprises  
the following operations: successive partially  
overlapping images are acquired under the control of a  
processor; displacement of the first image in relation  
15 to a second image is examined in order to provide a  
better correlation between the two images; said  
displacement component is determined in terms of pixels  
in a perpendicular direction with respect to the  
elongate sensor; the displacement component is compared  
20 to at least one threshold; according to the result of  
the comparison, a delay  $T$  imposed by the processor  
before the acquisition of a following image is  
preserved, or increased or decreased by a time  
increment  $dT$ . As a result, the correlation search is  
25 adapted according to the speed, which is unknown, of  
displacement of the finger.